PIONEER
Pioneer Energy Services

MICRORESISTIVITY LOG

Company CARODEN ENERGY, LLC
Well THELMA #1
Field STOLTENBERG
County ELLSWORTH State KANSAS

Location: API #: 15-053-21345-00-00
1400' FSL & 1020' FWL
SEC 1 TWP 17S RGE 10W

Other Services: CNL/CDL, DIL

Permanent Datum: GROUND LEVEL Elevation 1804'
Log Measured From: KELLY BUSHING
Drilling Measured From: KELLY BUSHING

Elevation: K.B. 1812', D.F. N/A, G.L. 1804'

Company CARODEN ENERGY, LLC
Well THELMA #1
Field STOLTENBERG
County ELLSWORTH
State KANSAS

Date	5/17/2016			
Run Number	ONE			
Depth Driller	3360'			
Depth Logger	3362'			
Bottom Logged Interval	3361'			
Top Log Interval	2100'			
Casing Driller	8.625" @ 322'			
Casing Logger	323'			
Bit Size	7.875"			
Type Fluid in Hole	CHEMICAL			
Salinity,ppm CL	3800			
Density / Viscosity	9.4 59			
pH / Fluid Loss	9.5 8.0			
Source of Sample	FLOWLINE			
Rm @ Meas. Temp	0.40 @ 60			
Rmf @ Meas. Temp	0.30 @ 60			
Rmc @ Meas. Temp	0.54 @ 60			
Source of Rmf / Rmc	CHARTS			
Rm @ BHT	0.22 @ 110			
Operating Rig Time	3 HOURS			
Max Rec. Temp. F	110			
Equipment Number	91			
Location	COLBY			
Recorded By	D. SCHMIDT			
Witnessed By	HERB DEINES			

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All interpretations are opinions based on inferences from electrical or other measurements and Pioneer Wireline Services, LLC cannot and does not guarantee the accuracy or correctness of any interpretation, and Pioneer Wireline Services, LLC will not be liable or responsible for any loss, costs, damages, or expenses incurred or sustained by anyone resulting from any interpretation made by any of our officers, agents or employees.

Comments

N/A DENOTES NOT AVAILABLE OR NON-APPLICABLE.

HOLLYROOD,
1 1/2 EAST ON AVE T, NORTH INTO

Log Measured From: KELLY BUSHING 8 Ft. Above Permanent Datum

THANK YOU FOR USING PIONEER ENERGY SERVICES
www.pioneeres.com 785-625-3858

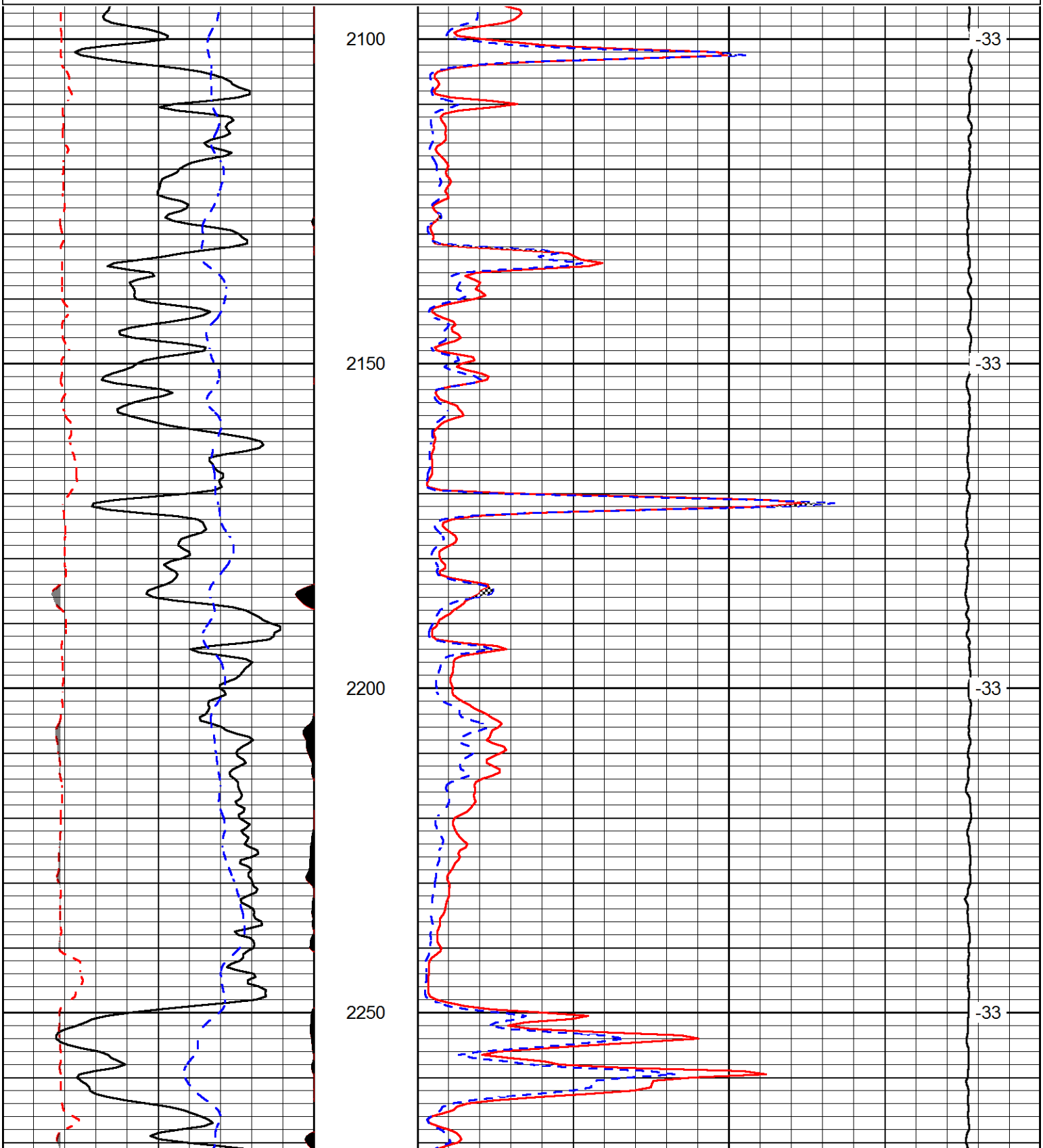
Your Pioneer Energy Services Crew	This Log Record Was Witnessed By
Engineer: D. SCHMIDT	Primary Witness: HERB DEINES
Operator:	Secondary Witness:
Operator:	Secondary Witness:
Operator:	Secondary Witness:

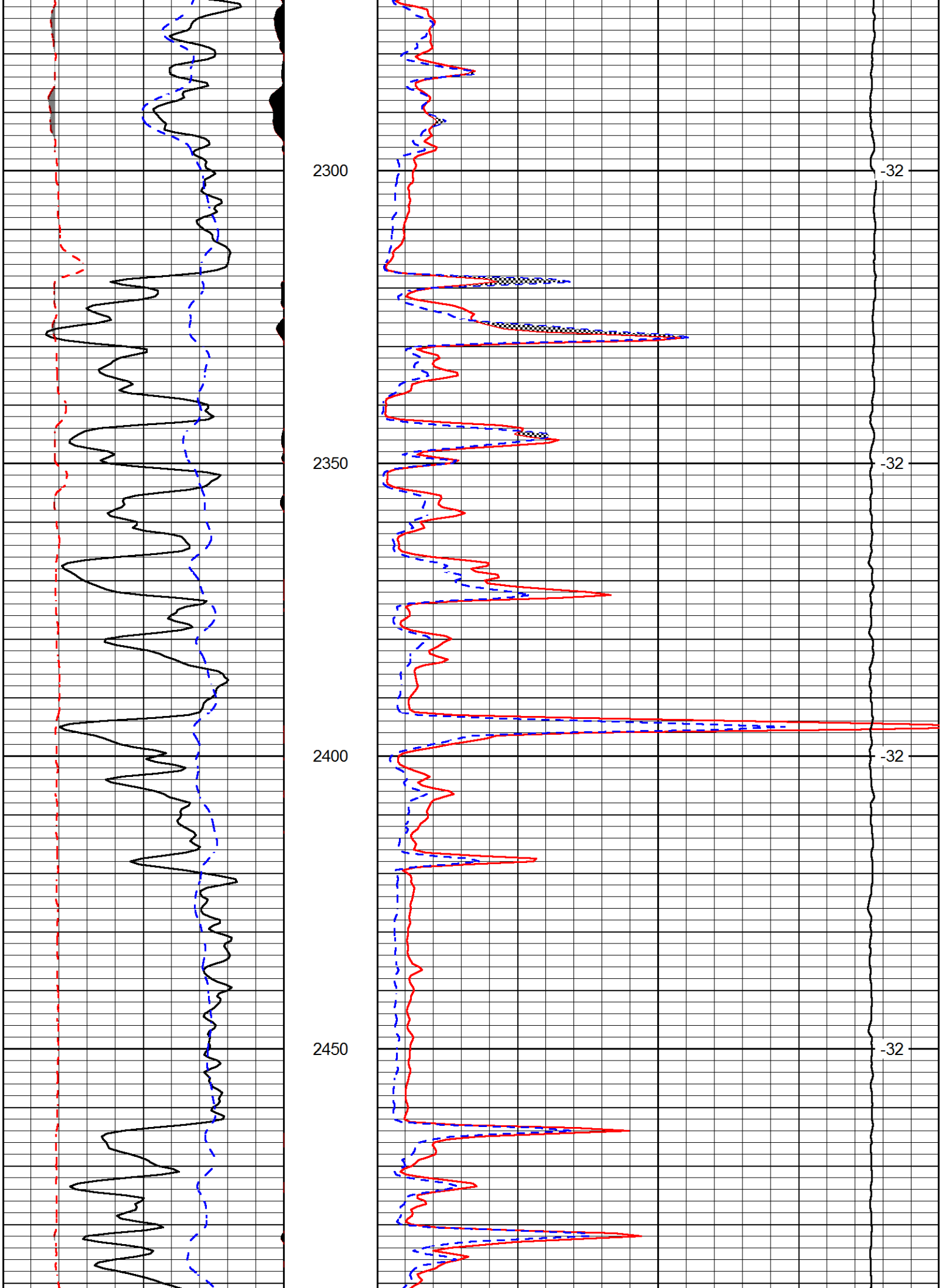
Database File	caroden_thelma_1hd.db
Dataset Pathname	DIL/castkml
Presentation Format	micro
Dataset Creation	Wed May 18 00:04:48 2016
Charted by	Depth in Feet scaled 1:240

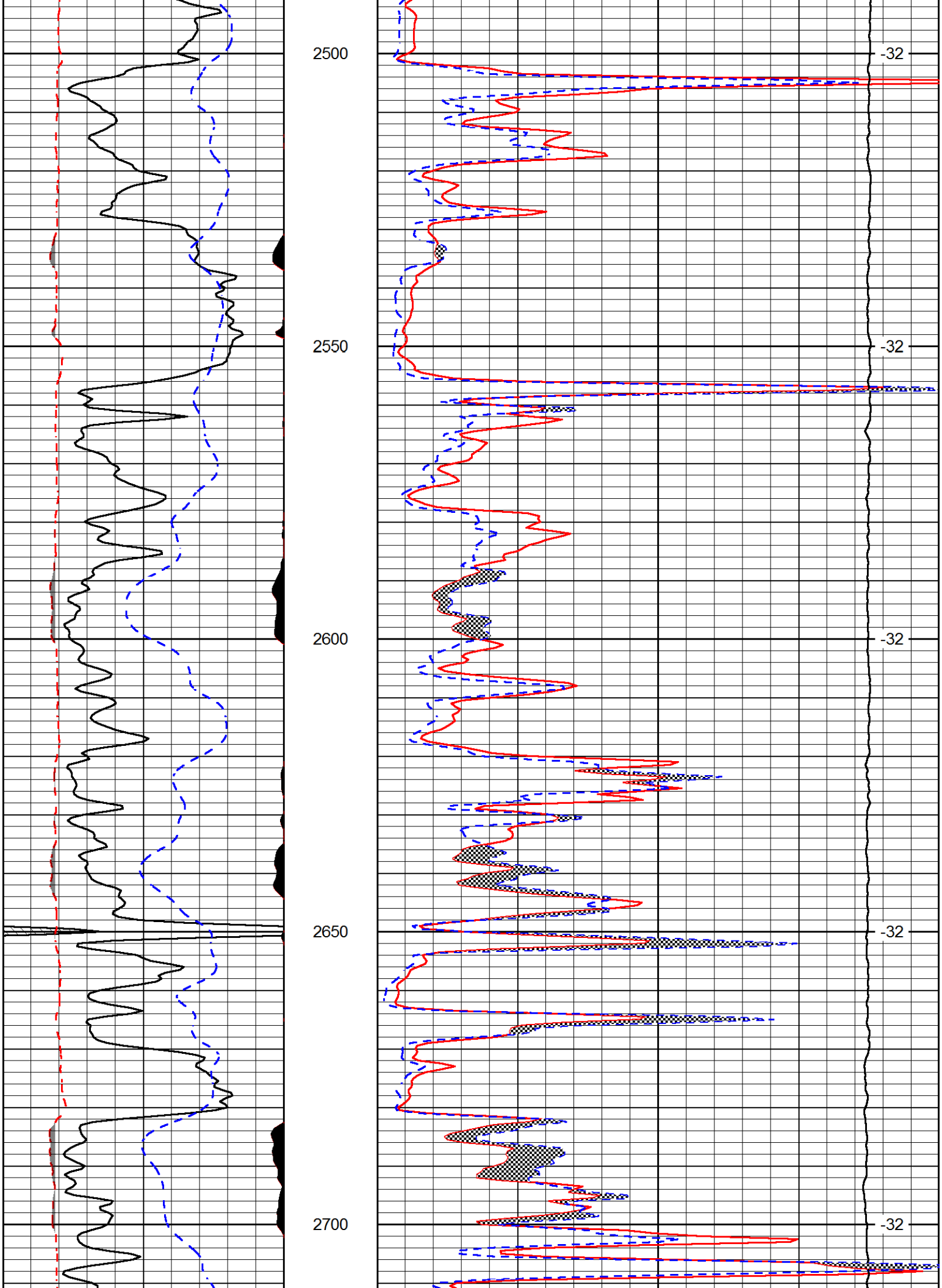
0	Gamma Ray (GAPI)	150
6	MCAL (in)	16
2.875	Mud Cake (in)	7.875
-200	SP (mV)	0

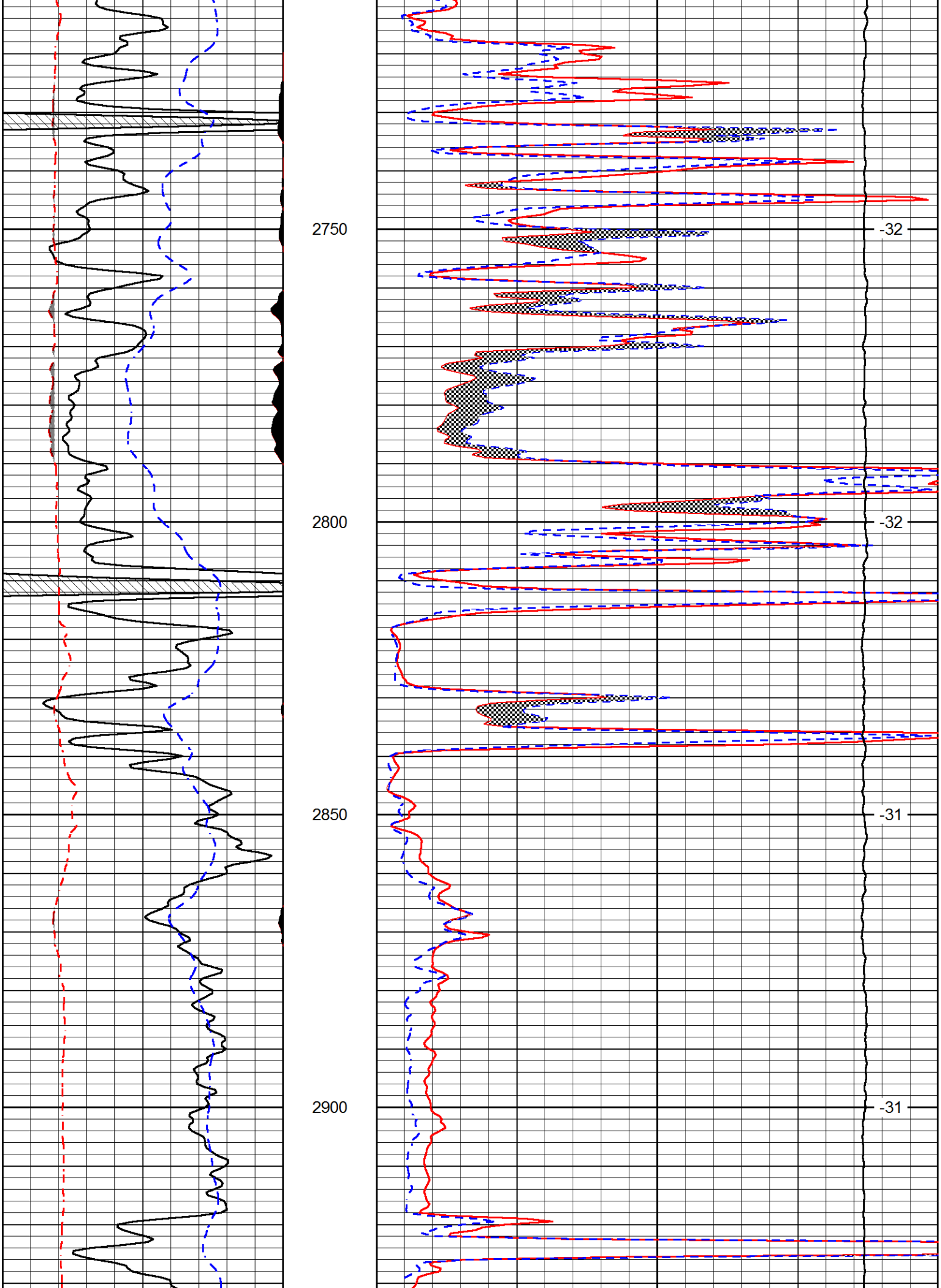
0	Micro Inverese 1 X 1 (Ohm-m)	40
0	Micro Normal 2" (Ohm-m)	40
10000	Line Weight (lb)	0

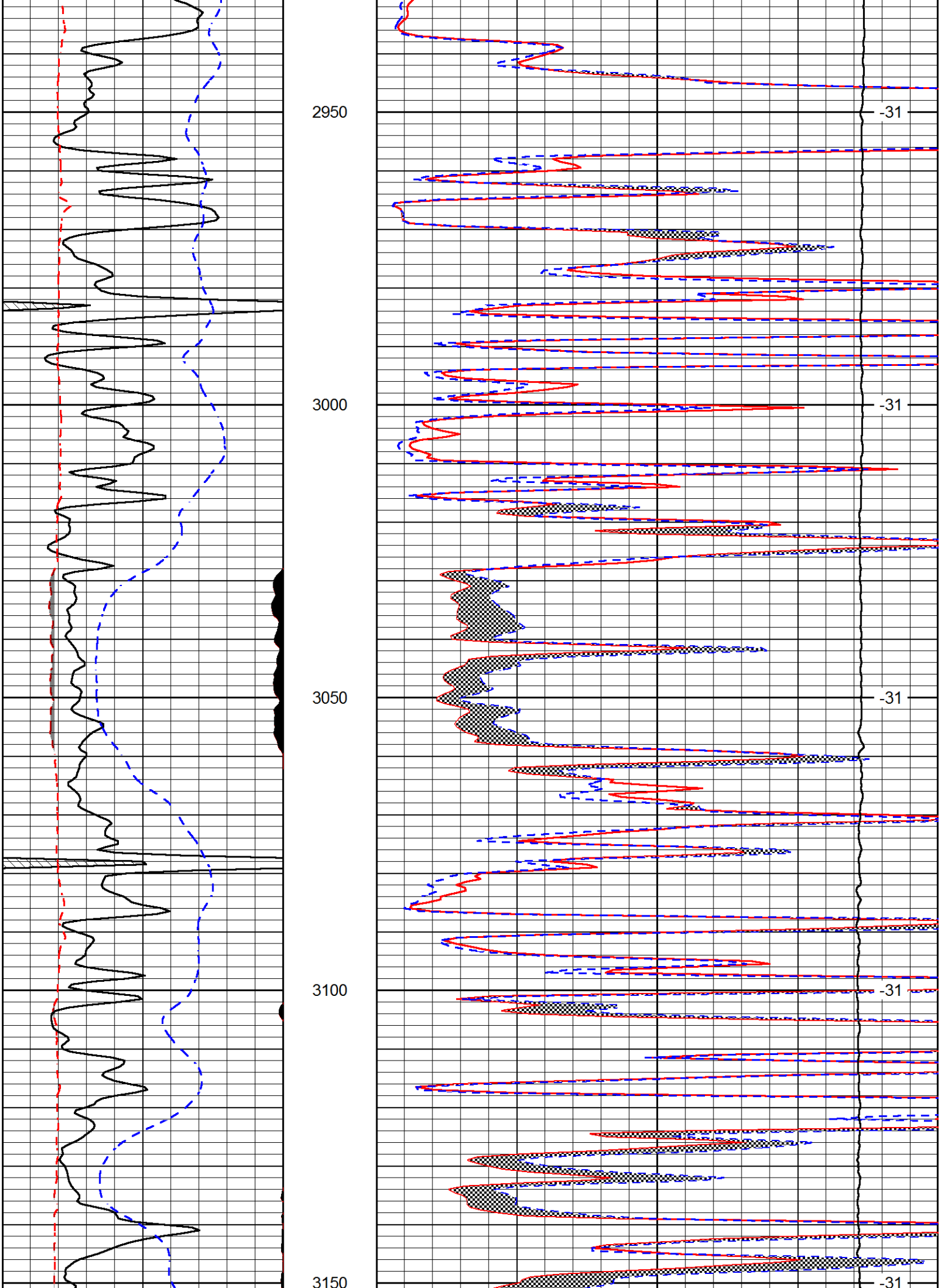
LSPD (ft/min)

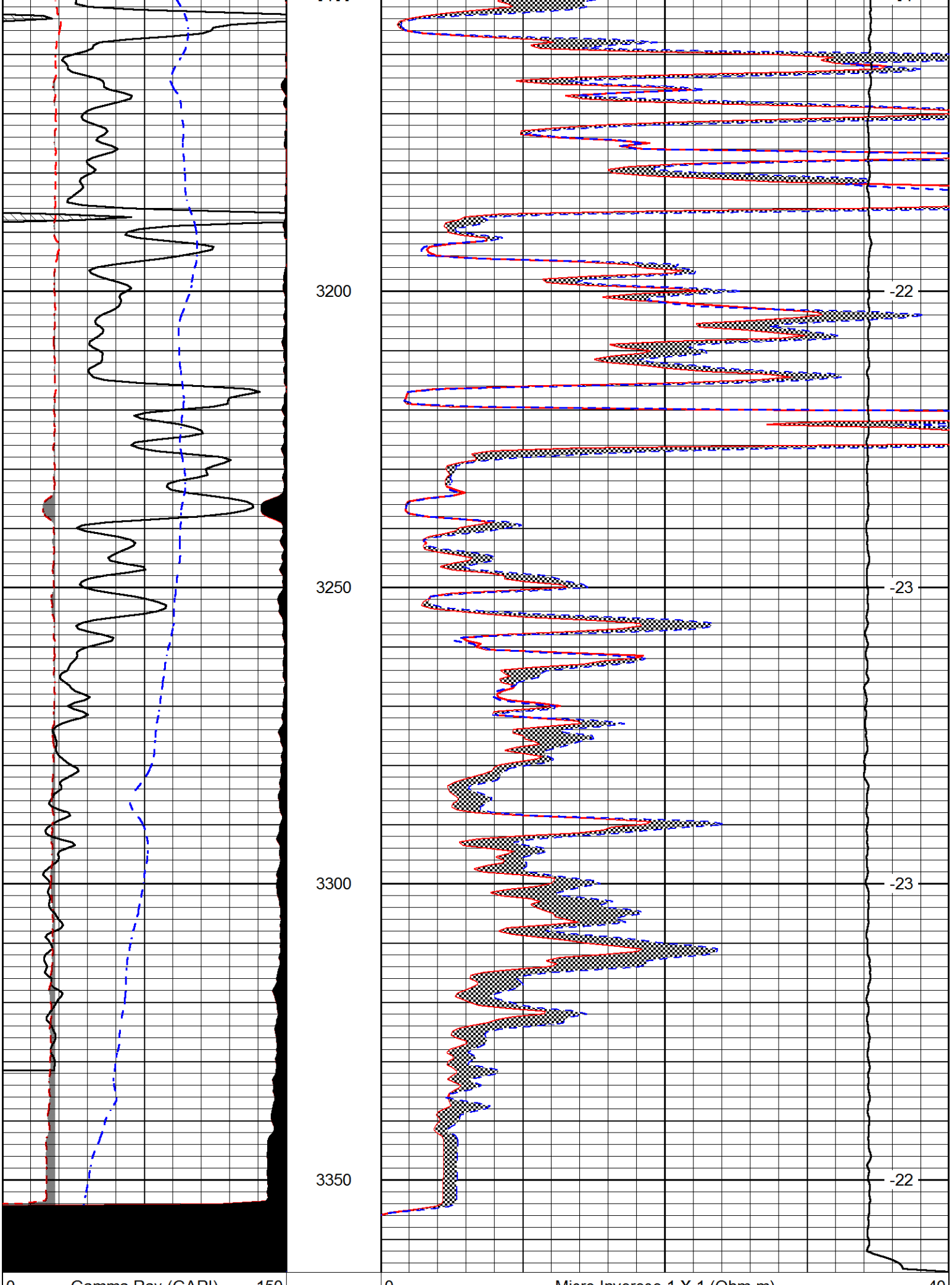



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3150
-31
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-31


3200
3250
3300
3350
-22
-23
-23
-22
0
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